



Government of West Bengal
Office of the Director,
School of Tropical Medicine
108, Chitta Ranjan Avenue
Kolkata – 700 073
Phone/Fax No (033) 2212 3695/97.
E mail: stmkolkatadirector@gmail.com

**NOTICE INVITING E- TENDER FOR PURCHASE AND INSTALLATION OF
HOSPITAL EQUIPMENT /INSTRUMENT BY THE DIRECTOR, SCHOOL OF
TROPICAL MEDICINE.**

(Through Pre-qualification)
(Submission of Bid through NIC e- tender portal)

Memo No. STM/DT/01/TENDER/471E/14

Dated 13.09.2014, Kolkata.

The Director, School of Tropical Medicine, having its office at 108, C R Avenue, Kolkata – 700 073 is going for e-tender on behalf of the Health & Family Welfare Department, Government of West Bengal for obtaining the rate of Hospital Equipment/ Instruments as per annexed list from the bonafide manufacturer/authorized distributor. Necessary earnest money to be submitted for participation in the Tender through Demand Draft/Pay order is appended in the table below:

Name of the items	Earnest money
As enlisted	Rs 50,000/- per tenderer

List of instruments: DEPARTMENT OF MICROBIOLOGY (VIROLOGY UNIT)

Sr. no	Name of the Instrument	Quantity
1	Real time PCR	1
2	Automated DNA Sequencer	1
3	Automated purification and extraction system For Nucleic Acid	1
4	Elisa Reader	1

1. General Instructions:

In the event of e-filing, intending bidder may download the tender documents free of cost from the website : <https://wbtenders.gov.in> directly with the help of Digital Signature Certificate or from the Health & Family Welfare Department's website www.wbhealth.gov.in & necessary earnest money may be remitted to the office of the Director, School of Tropical Medicine through demand draft / pay order issued from any nationalized bank/scheduled bank in India payable at Kolkata drawn in favour of Director School of Tropical Medicine, Kolkata and also to be documented through e-filing.

2. Submission of bids :

Both Technical bid and Financial Bid are to be submitted concurrently duly digitally signed by the authorized signatories in the website <https://wbtender.gov.in>. All papers must be submitted in English language.

3. Time Schedules for the e-tender :

THE TIME SCHEDULE FOR OBTAINING THE BID DOCUMENTS, PRE BID MEETINGS, REGISTRATION WITH THE TENDERING AUTHORITIES, THE SUBMISSION OF BIDS AND OTHER DOCUMENTS ETC. WILL BE AS PER THE LIST PROVIDED IN CLAUSE NO 21 AS GIVEN BELOW.

4. ELIGIBILITY FOR QUOTING :

Only Manufacturers OR authorized distributors are only eligible for quoting having an Annual Turnover of Rs 3 (Three) Crore for last 3(three) years i.e for the year 2011-12, 2012-13 & 2013-14.

5. SUBMISSION OF THE TENDERS :

The tender is to be submitted in a two Bid System.

[A] Technical Bid:

(a). Statutory Cover Containing the following documents:

1. COVER "A":

"BID A": PART I

One folder for earnest money deposit with copy of the Demand draft/Pay order should be uploaded. Local SSI(s) should upload certificate of registration/EM II for claiming EMD exemption.

(SINGLE FILE MULTIPLE PAGE SCANNED)

Essential Requirements of the Tendering Firm for participation" shall contain all papers related to the essential requirements of the Tenderer for participation in the tender viz.

A	Copy of Demand Draft/Pay order of Rs 50,000/- in favour of Director School of Tropical Medicine, Kolkata submitted to purchases section of the School of Tropical Medicine as Earnest Money for the whole tender.
B	CHECK LIST in the prescribed format
C	Application in the prescribed format given in Annexure I
E	Authorization letter of signatory from Company in Annexure II
F	Authorization letter of Distributor from Company in Annexure III

“BID A”: PART II

TECHNICAL SPECIFICATIONS OF THE ITEMS IN THE GIVEN FORMAT IN PDF.

NON-STATUTORY/ MY DOCUMENTS Containing the following documents:

Sn	Category	Sub Category	Sub Category Description
A.	Certificates	A1. Certificates	PAN Card of the authorized signatory
			Professional Tax Registration certificate
			VAT/ CST Registration certificate
B.	COMPANY DETAILS	B1. COMPANY DETAILS	Trade License
			Registration with Registrar of Companies
C.	CREDENTIAL	C1: Credential 1	Affidavit for No conviction
			Certificate of country of origin relating to the Equipment/Instrument
		C2 : Credential 2	Manufacturing License
			Manufacturer's Guarantee
			Test Report from the leading Test House
			Quality Assurance certificate of the Equipment/Instrument.
			LIST OF PURCHASERS
			Credential certificate from Purchasers
D.	FINANCIAL INFO	PAYMENT CERTIFICATE 1	Income Tax Returns submitted for the year 2011-12
			Income Tax Returns submitted for the year 2012-13
			Income Tax Returns submitted for the year 2013-14
			VAT/CST Returns (of the last quarter) for the year 2011-12
			VAT/CST Returns (of the last quarter) for the year 2012-13
			VAT/CST Returns (of the last quarter) for the year 2013-14
		D1. P/L & BALANCE SHEET	1. P/L & Balance sheet 2011-12
			2. P/L & Balance sheet 2012-13
			3. P/L & Balance sheet 2013-14

- **The Brochure/Testimonials of the Equipment/Instrument should be submitted alongwith the hard copy documents for examination of the tender selection committee/purchase committee.**

2. COVER “B” :

[B] FINANCIAL BID “B” :

(i) BOQ for INR (in excel sheet)

The folder as “Financial Bid” shall contain base price of the equipment/Instrument with 3(three) years on-site comprehensive Warranty in Indian currency including cost of insurance, packing, freight charges, delivery charges, testing charges, incidental charges, if any and cost of the installation of the Instrument but excluding

of VAT/CST, Entry tax, Cess and other Govt taxes(if any) to be shown separately in the Bill of Quantities.

The cost of CAMC for next 5(five) years are to be quoted separately in the BOQ. The L_1 will be determined only on Base rate with 3(three) years comprehensive on-site warranty including cost of insurance, packing, freight charges, delivery charges, testing charges and incidentals, if any.

The appropriate % of VAT/CST, Entry tax, Cess or other taxes as claimed by the bidder would be applicable as per prevailing Govt order. The cost of CAMC for next five years is to be quoted separately in the BOQ.

The tenderers are required to submit the hard copies of Bid A along with the Brochure of the Equipment/instrument as per schedule more clearly described in the time line vide clause 21 along with Earnest Money Deposit (EMD) in separate packets. Submission of hard copy of Bid A to the office of the Director, School of Tropical Medicine (STM) is for reference only while examining the technical bid on line and will not be treated as substitute for on line submission. However, Brochure/testimonials of the equipment are to be enclosed separately with the hard copy of Bid A for examination. Submission of hard copy of Bid B is totally prohibited and only be submitted through on line through NIC portal.

6. Evaluation of the tenders

During the tender evaluation process on line, the "Bid A" will be opened first. Those Tenderer who have qualified the essential & other requirements will be identified and only their "Bid B" i.e. Financial bid will be opened. The "Bid B" of those Tenderer failing to meet the technical & other requirements of participating in the tender will not be opened and be rejected. The Tenderer offering the item found suitable and as being as per the tender specifications will only be selected.

The Tenderer who have been so identified to have been technically suitable in the context of above will be deemed to have passed the test of essential and other requirement of the quoted item or items.

The "Bid B" (Financial Bids) of only these tenderers passing the essential and other requirement test will be opened then subject to verification of hard copies of the audited balance sheet and Profit & Loss Accounts of the tenderer for the last three years i.e for the year 2011-12, 2012-13 & 2013-14.

If found suitable in the context of above pre qualification etc, the Tenderer quoting the lowest rate in the base price with 3(three) years comprehensive on-site warranty will be considered as successful.

7. Cost of Earnest Money :

Each tender has to be submit, unless exempted under the existing orders of the West Bengal Govt. must deposit Earnest Money in the form of Demand Draft/Pay order from any Nationalized Bank/scheduled bank in India for Rs. 50,000 (Rs Fifty Thousand) only for the whole tender.

The earnest money is to be deposited in the prescribed time before opening of Bid A. The onus of proving that a Tenderer is exempted from Earnest Money will lie on the Tenderer and must be proved by submission of valid documents.

The earnest money of the Tenderer will liable to be forfeited if the Tenderer withdraws his tender as a whole or for any particular item or items at any stage after

the opening of the tender, or fails / refuses to enter into written agreement for any of all of the items of his accepted tender within the time specified when requested to do so/fails to furnish Performance Bank Guarantee within the stipulated time.

The Earnest Money will be refunded after finalization of the tender or within 3 (three) months from the date of opening of tender, whichever is later against the specific prayer of Tenderer.

8. RATE:

The price is to be quoted in Indian Rupees with cost of 3(three) years on-site comprehensive warranty including cost of insurance, packing, forwarding, freight charges, delivery charges, testing charges, incidental charges, if any and installation of the instrument. The instrument is to be transported in such packaging so that there is no damage to the primary packaging during the transportation process.

VAT/CST, Excise Duty, Entry Tax & Cess etc. which shall be quoted separately in the template for Bill of Quantities (BOQ).

Percentage of Excise Duty, CESS etc, Percentage of VAT to be mentioned in the appropriate Column of the template for Bill of Quantities.

9. ORDER & SUPPLY:

Orders for the supply of the approved products will be placed with the successful tenderers after the execution of the agreements. The successful tenderer will have to supply within the specified time schedule that had been assured at the time of selection as supplier.

10. WITHDRAWAL / CANCELLATION & PURCHASE POLICY OF TENDERING AUTHORITY:

- a. The tendering authority reserves the right to withdraw any item from the tender at any stage. The selection of such item, if already made in favour of any Tenderer, shall be treated as cancelled.
- b. The tendering authority reserves the right to reject or accept any tender or part thereof at any stage or to split any tender without assigning any reason. Withdrawal of tender or any revision after submission of tender by the Tenderer will not be allowed.
- c. The tendering authority reserves the right to accept or reject any tender, in part or in full, without assigning any reason.
- d. Purchase will, however be made following the existing purchase policy of the Govt of West Bengal and its amendment(s) made from time to time. The purchase policy of the State Government as provided in the West Bengal Financial Rules, the policy of price preference in particular incorporated under Notification No. 10500-F dated 19.11.04 should be observed in considering the tenders.

11. Spare Parts

On being selected, the L₁ Bidder will undertake that supplies of necessary maintenance equipment and spare parts will be made available for all items/equipments and the complete system for at least five years on a continuing basis. However, this does not relieve the supplier of any warranty obligations under the contract.

12. GUARANTEE / WARRANTY PERIOD:

THE TENDERERS MUST QUOTE BASIC RATE ALONGWITH 3 YEAR COMPREHENSIVE ON SITE WARRANTY OF ENTIRE SYSTEM (INCLUDING ALL SPARES & LABOUR) FROM THE DATE OF COMPLETION OF THE SATISFACTORY INSTALLATION. For Extended warranty of 5 years rate should be quoted separately.

13. Delivery, Installation and Commissioning :

- a. Delivery of the goods at the purchaser's premises shall be completed by the Supplier in accordance with the terms specified by the purchaser. The installation, testing and commissioning of the proposed system shall be completed in accordance with the order.
- b. In case of distributor, the firm should be direct distributor from the principal's. The sub-distributor or authority by distributor will not be accepted at all.

14. SPECIAL TERMS AND CONDITIONS FOR TENDER SUBMISSION

Quality assurance certification like ISO 9000 series or higher should be attached wherever applicable.

15. PENALTY CLAUSES-

PENALTY FOR FORMATION OF CARTEL OR FURNISHING OF FRAUDULENT/ MISLEADING DOCUMENTS:

- i. If during the tender process or at any state during the validity of the tender period, it is found that a Tenderer(s) has formed a cartel in what so ever form or name to fix up the rates or suppliers to the detriment of the fairness of the tender process, penal measures shall be initiated by debarring him from joining in the tender and his earnest money will be forfeited straightaway and the firm will be blacklisted for a period of 3(three) years.
- ii. Similar penal measures shall also be initiated against those tenderers who have submitted false/ misleading/ fraudulent documents or made incorrect declarations. The penal measure will also include Forfeiture of Performance Bank Guarantee if enlisted as a supplier.

16. APPEAL:

Appeal against the decision of the Director, School of Tropical Medicine, West Bengal and the to impose such a penalty will lie with the H&FW Dept. The Special Secretary/Secretary/Principal Secretary will be the appellate authority within the Department of Health & Family Welfare, Government of West Bengal. Before imposing any penalty as per clauses 15 the concerned supplier may appeal to the authority citing the proper reasons for non-imposing the penalty as stated.

17. AGREEMENT:

On a tender being accepted, intimation of acceptance will be forwarded to the Tenderer by Director, STM. After communication of the same, the Tenderer will have to execute agreement in the prescribed form with the Director, STM.

18. VALIDITY PERIOD OF AGREEMENT:

The contract period will be for a period 180 days from the date of finalization of tender.

19. PERFORMANCE BANK GUARANTEE'

The performance bank guarantee will be mandatory for all suppliers and will not be waived in any case.

The successful tenderers shall be required to furnish the 'Performance Bank Guarantee'@ 10% of L₁ rate per item for which the Tenderer has been selected as supplier.

20. PAYMENT TERMS:

Payment will be made through e payment system through ECS/RECS/RTGS after execution of due supply as ordered subject to :

- a. Submission of Performance Bank Guarantee in terms of Clause 19 and subject to penalty clause in terms of Clauses 15.
- b. Supply of the materials as per specification as provided in the tender documents.
- c. Supply of the materials within the supplied period as specified in the work orders.
- d. On being selected, the successful vendors will have to submit one application to the STM stating the name of the payee/ recipient, Bank account no with MICR code, IFSC of the payee/recipient for making e payment.
- e. No manual payment is allowed to be made as far as practicable.

21. Dates & Information :

Sn	Items	Publishing date(s)
1.	Date of uploading of N.I.T. Documents (online) from this end.	18.09.2014.
2.	Documents download/sell start date (Online)	18.09.2014
3.	Date of Pre Bid Meeting with the intending bidders at the office chamber of the Director, School of Tropical Medicine, 108, C R Avenue, Kolkata – 700 073	22.09.2014 at 12.00 Noon
4.	Date of hoisting of documents at Departmental Website (www.wbhealth.gov.in)	18.09.2014
5.	Bid Submission starting (On line)	18.09.2014 at 11.00 am
6.	Bid Submission closing (On line)	15.10.2014 at 05.00 pm
7.	Last Date of submission of original copies along with Earnest Money Deposit (Hard Copy)	16.10.2014 by 3.00 pm
8.	Bid opening (Bid A)	17.10.2014 at 11.00 AM onwards
9.	Date of uploading list for Technically Qualified Bidder (online) (Bid A)	18.10.2014 onwards
10.	Date & Place for opening of Financial Proposal (Bid B) (Online)	18.10.2014 onwards
11.	Date of uploading of list of bidders along with the approved rate	18.10.2014 onwards

DIRECTOR, SCHOOL OF TROPICAL MEDICINE RESERVES THE RIGHT TO CHANGE THE ABOVE SCHEDULE IN CASE OF ANY EXIGENCIES AFTER PUTTING UP A NOTICE IN THE DEPARTMENTAL WEBSITE AND STM NOTICE BOARD.

No objections in this respect will be entertained raised by any Bidder who will present during opening of bid, or from any Bidder who will absent at the time of opening of Financial Bid. No informal tenderer will be entertained in the Bid further.

During the scrutiny, if it come to the notice to tender inviting authority that the credential or any other paper found incorrect/ manufactured/ fabricated, that bidder would not allowed to participate in the tender and that application will be out rightly rejected without any prejudice AND PENAL PROVISION AS LAID DOWN ABOVE WILL BE IMPOSED AGAINST HIM.

A HELP DESK is set up in the office of .Director, School of Tropical Medicine, 108, C R Avenue, Kolkata – 700 073 for technical guidance & Dy. Director of Health services (E&S), Central Medical Stores,141,A.J.C. Bose Rd, Kolkata -700014 to help and guide the prospective bidders about their registration, holding of Digital Signature Card and allied matter. Prospective bidders may contact personally or over phone vide phone no (033)2212 3695/97 or mail their queries in the following e mail addresses:

- a. stmkolkatadirector@gmail.com
- b. stmkolkatasecretary@gmail.com

Prospective bidders must take training from authorised agencies stationed in the Cental Medical Stores, 141, A J C Bose Road, Kolkata – 700 014 before submission of their bids.

The Tender Selection Committee/Purchase committee reserves the right to accept, reject any item or items and cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

Director
School of Tropical Medicine,
108, CR Avenue, Kolkata – 700 073

FORMAT FOR CHECK LIST

Sn	Items	Pl mark ✓		Page no
		Yes	No	
1	Application submitted in Annexure I	Yes	No	
2.	Annexure II (Authorization letter of signatory from the Company)	Yes	No	
3.	Annexure III (Copy of authorization of the distributor from the Company.	Yes	No	
4.	Copy of PAN Card of the authorised signatory :	Yes	No	
5.	Copy of Demand Draft/Pay order of Rs 50000/- in favour of Accounts Officer, School of Tropical Medicine, Kolkata-700073 as Earnest Money	Yes	No	
6.	Last 3 financial years' returns of Income Tax i.e. for 2011-12, 2012-13 & 2013-14	Yes	No	
7.	Last quarters of last 3 financial years' returns of VAT for 2011-12, 2012-13 & 2013-14	Yes	No	
8.	Last quarters of last 3 financial years' returns of CST for 2011-12, 2012-13 & 2013-14	Yes	No	
9.	Affidavit of non conviction affirmed before a Notary public/ First Class Judicial Magistrate/Executive Magistrate (affidavit sworn after 01.06.2014)	Yes	No	
10.	Manufacturer's guarantee	Yes	No	
11.	Test report from leading test house	Yes	No	
12.	Certificate about quality assurance	Yes	No	

Annexure I

APPLICATION FORMAT

(To be furnished in the Company's official letter pad with full address and contact no etc)

To The Director,
School of Tropical Medicine
108, C R Avenue,
Kolkata – 700 073

Sub : NIT for Hospital Equipment/ Instruments for School of Tropical
Medicine, Kolkata (STM)
Ref : STM Memo No dated

Sir,

Having examined the pre-qualification & other documents published in the N.I.T, I /we hereby submit all the necessary information and relevant documents for evaluation :

1. That the application is made by me / us on behalf of
In the capacity of.....duly authorized to submit the offer.
The authorization letter from the Company is attached in Annexure II.
2. We accept the terms and conditions as laid down in the NIT mentioned above and declare that we shall abide by it for throughout the tender period.
3. We are offering rate for the following item /items and assured supply to the School of Tropical Medicine under Health & Family Welfare Department, Government of West Bengal as per Table-1 (Instruments Specification)
4. The copy of the authorization letter from the manufacturer is attached in annexure III
5. In the event of being selected, supply will be made within the stipulated period excepting the condition which is beyond our control.
6. We understand that :
(a) Tender Selection Committee/ Purchase committee of the STM/ H&FW Dept can amend the scope & value of the contract bid under this project.
(b) Tender Selection Committee/ Purchase committee of the STM/H&FW Dept reserves the right to reject any application without assigning any reason ;

Date :-

Signature of applicant including title
and capacity in which application is made.

Contact no :

Tele :

Mobile :

E Mail address :

Annexure II

Authorization letter from Company for authorized signatory who will upload the bid on behalf of the Company

Annexure III

Copy of authorization letter of the distributor from Manufacturer

TABLE I
LIST OF EQUIPMENT / INSTRUMENTS :
(SPECIFICATIONS)

Name of the Instruments : DEPARTMENT OF MICROBIOLOGY (VIROLOGY UNIT)

1. Name of the Equipment: Real time PCR

The equipment should have following minimum specifications:-

Sl. no.	Technical Specifications	Technical Specification quoted by bidder	Bidders deviation if any
1.			

Specifications for: Real time PCR

Thermal Cycling System: Peltier-based system

Block Format: 96-well block (Fast)

Compatible Consumables: 96-well plates (Fast) and 0.1 mL tube strips

Supported Volumes: 5–30 µL

Sample Ramp Rate:

- Fast Mode: +/- 3.5°C/sec
- Standard Mode: +/-1.6°C/sec
- 9600 Emulation Mode: +0.8 and -1.6°C/sec

Peak Block Ramp Rate: 5.5°C/sec

Temperature Range: 4°C-94°C

Temperature Accuracy: +/-0.5°C of set point/display temperature, measured at 3 minutes after clock start.

Well to well Uniformity: +/-1.0°C, 30 seconds after clock start.

Optical System: Tungsten-halogen lamp excitation source. Five-excitation filters, five-emission filters and CCD camera

Calibrated Dyes at Installation: SYBR[®] Green I, FAM[™], VIC[™], JOE[™], NED[™], TAMRA[™], ROX[™], Texas Red[®] , Cy3[™], Cy5[™]

Additional Dyes Available: Calibration for new dyes within the wavelength range is possible by following the custom dye calibration procedure in the User's Manual. Purchase of additional filter sets is not necessary.

Passive Reference Dyes: ROX™ or any calibrated dye. Option exists to select no passive reference.

Data Collection:

Standard: Collects data for all 5 filters for all wells regardless of plate setup. Plate setup may be altered after run completes.

Expert: Collects data for selected individual filter or group of filters for all wells regardless of plate. Plate setup may be altered after run completes.

Quantitative PCR Run Time: 37 min (fast mode), ~30 min (fast mode-expert), <2 hrs (standard and 9600 emulation mode) for 40 cycles.

Software: The instrument software must be capable of **detecting and analyzing a different gene, SNP or pathogen target in every well of the 96-well plate**. The instrument software should utilize a specialized Multicomponenting Algorithm designed to provide precise deconvolution of multiple dye signals in each well to ensure minimal crosstalk when using multiple fluorophores for multiplex assays. The instrument should be capable of detecting multiplex reactions containing 4 gene targets when using a passive reference dye for normalization, or 5 gene targets if passive reference normalization is not utilized.

The software must have **tools for compliance to FDA510K or CE-IVD such as security access, auditing and e-signatures**. The IQ OQ and PQ of the instrument should be performed at the time of installation with recalibration after 6 months.

Dedicated licensed full version software for primer and probe design with comprehensive assay design and development guidelines for quantitative and qualitative real-time assays should be provided to enable designing of custom oligo assays. System should be quoted with kit for H1N1 testing.

2. Name of the Equipment: Automated DNA Sequencer

The equipment should have following minimum specifications:-

Sl. no.	Technical Specifications	Technical Specification quoted by bidder	Bidders deviation if any
1.			

Specifications for: Automated DNA Sequencer

1. General specifications :

Fluorescence-based 8 capillary upgradeable to 24 capillary. The system should be based on proven technology of capillary electrophoresis Genetic analysis system. The system should have all hardware and software needed to operate and analyze data for DNA sequencing, genotyping and fragment analysis. **The system should have CE-IVD certification for instrument, software and reagents.**

2. Capillary Electrophoresis technology:

Capillaries should be uncoated internally with new generation of polymer optimized for its performance for medium to high throughput DNA sequencing and fragment analysis requirements. Should have choice of capillaries with different lengths and choice of polymer for variety of applications. The system should be also capable of 'one polymer one array' for both sequencing as well as fragment analysis applications with easy switchover between the runs even on the same plate.

3. Separation Matrix:

The instrument should be able to use appropriate flowable and performance optimized polymers as the separation matrix so that before each run, the capillaries should be automatically be replenished with fresh polymer that dynamically coats capillary wall to eliminate electro-osmotic flow. The system should have capability for tracking consumables using RFID technology to monitor usage, lot nos., part nos., expiry dates, and on instrument lifetimes.

4. Auto sampler plate kits:

Fully integrated with both 96 well sample plates and standard/fast tubes, providing continuous, unattended operation for every phase of the process, including polymer-loading by means of automated polymer delivery system, sample injection, separation, detection and data analysis for a true automation.

5. Detection Technology:

By using Virtual Filters and Peltier cooled charged coupled device (CCD) camera. The Excitation of all fluorescent dyes should be by a long life solid state laser 505nm. The instrument should be capable of detecting minimum six Fluorescent Dyes and readily accommodate new dyes sets and applications as they become available without requiring changes in the optical hardware.

6. Operating Temperature Range & Temperature Uniformity:

- The operating temperature range should be 18⁰C-65⁰C.
- Operating environment temperature 15⁰C-30⁰C
- Room Temperature should not fluctuate +/- 2⁰ when the instrument is running.
- Humidity : 20%-80% (non-condensing) Temperature Uniformity

7. Software and Minimum Computer Requirements:

- Intuitive easy to use software for data collection with single page display for common operations. Workflow driven user interface with real time data quality assessment and sample re-injection.
- Hardware : Latest compatible configuration of system controller

8. Applications:

- Run conditions must be optimized for several applications, such as de novo or comparative sequencing, fragment analysis applications.
- The system should be a Multi-application Platform supplied with Sequence analysis software for fragment analysis and other available software.

9. Reagents & Consumables:

Reagents and consumables with CE-IVD mark such as :

- Polymer POP-7
- 36/50 cm capillary array
- Buffer for cathode and anode
- Hi-Di Formamide
- Plastic Wares etc.

10. Power Backup: A compatible 2 KVA online UPS with 30 minute backup should be provided.

11. Service and Warranty:

- The vendor must have a fully functional own lab (preferably NABL Accredited) to offer Application training with Field Applications / Service Support to help solve chemistry and instrumentation problems.
- The instrument should carry a warranty for 12 months from installation.

3. Name of the Equipment: Fully-Automated purification and extraction system For Nucleic Acid.

The equipment should have following minimum specifications:-

Sl. no.	Technical Specifications	Technical Specification quoted by bidder	Bidders deviation if any
1.			

Specifications for: Fully-Automated purification and extraction system For Nucleic Acid.

Fully OR Semi Automated For Nucleic Acid only OR for other purifications like proteins, viral etc.	The system should be a FULLY automated walk away nucleic acid (both DNA/RNA), proteins, plasmids, viral (single or dsRNA), Gel and PCR purification etc. extraction system to provide a very high quality of extract for sensitive detection
Chemistries	It should work with proven spin-column chemistries for all the applications. Should come with an integrated centrifuge and lysis station.
Sample type	The system should be compatible with a wide variety of sample types like: blood, body fluids, serum, plasma, plant lysates, cultures etc. to use with different downstream molecular biology applications
Through-put	The system should have flexible run size with at least capacity of 12 isolations in one run
Pre-Treatment	The system should be able to do complete process including the pre-treatment steps like lysis with heating and shaking automatically on board
Pipetting system	Pipetting system should use filter-tips to avoid cross-contamination. Also, it should be able to handle the liquid from 5-900 ul. Should have a robust robotic gripper for efficient transfer of columns/tubes.
Load-Check	A comprehensive load check should be performed prior to sample processing to check worktable setup and to help to ensure correct loading of the instrument. The system should have intelligent sensors like optical and ultrasonic sensors for liquid level detection of reagent volumes, waste level, consumables and tips check and the software must not allow start of run unless the same checks are passed
Reliability and reproducibility in results	All extraction should be based on reagents with preset standardized protocols which are stable at room temperature for reliable and reproducible results

Standardized protocols and customization for future use and flexibility	The system must have all standardized protocols with standardized kits to process various sample types for all kinds of applications. The system must also be open to add customized protocols as per the requirement of the user.

4. Name of the Equipment: ELISA READER PLUS WASHER

The equipment should have following minimum specifications:-

Sl. no.	Technical Specifications	Technical Specification quoted by bidder	Bidders deviation if any
1.			

Specification for Elisa Reader Plus Washer

Light source	: Quartz-halogen lamp 6V/1
Wavelength range	: 340 – 850 nm
Filters	: 8-position filter wheel, the instrument is delivered with the following standard filters installed: 405 nm; 450 nm; and 620 nm. Additional filters can be ordered separately
Half-bandwidth of filters	: 3 – 9 nm
Read-out range	: 0 – 6 Abs
Linearity	:(96-well plate) 0 – 3 Abs, $\pm 2\%$ with normal mode 0 – 3 Abs, $\pm 2\%$ with fast mode
Resolution	: 0.001 Abs
Accuracy	:(405 nm) $\pm 1\%$ or 0.003 Abs, whichever is greater (0 – 2 Abs), $\pm 2\%$ (2 – 3 Abs)
Precision	:(405 nm) $CV \leq 0.2\%$ (0.3 – 3 Abs), $CV \leq 1.0\%$ (3 – 4 Abs), normal mode
Measurement speed	: < 6 s, 96-well plate < 12 s, 384-well plate
Optional incubator	
Temperature range	: from ambient + 4° C up to 50° C
Shaking	: Linear shaking with three modes: slow, medium and fast
Robotic compatibility	: Yes
Keypad and display	: High contrast color display (480 x 272 dots and 256 colors)
User interface	: Internal software or PC control with SkanIt Software
Internal memory	: At least up to 100 assay protocols and 100 test results, 96-well plate
External printer type	: HP PCL5
Communication	: USB for computer connection, USB memory stick position for data export USB for external printer
Mains input	: 100 – 240 V (50/60 Hz)
Weight	: 8.5 kg

Specification of ELISA Plate washer

Plate Type 96-Well Plates.

Bottles 2L wash bottle, 2L waste bottle Wash/Waste Bottle Capacity 1,

Wash Heads 1x8 ;Wash Volume 50 to 1000 μ L; Residual Volume <2 μ L;

Dispense Volume 50 to 400 μ L ;Accuracy < 5% @ 300 μ L; Precision < 3% (CV) @ 300 μ L (96-well plate) Prime Volume 5 to 100mL; Display LCD; USB Connections should be possible